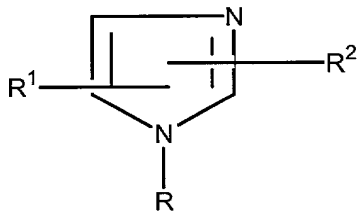
WHAT IS CLAIMED IS:

1. A reagent for the determination of water content of a sample according to the Karl Fischer method, the reagent comprising a base comprising imidazole and a substituted imidazole having the general formula:



wherein R and R^1 are independently selected from the group consisting of hydrogen, phenyl, substituted phenyl, and a monovalent substituted or unsubstituted saturated or unsaturated hydrocarbyl moiety having from 1 to about 4 carbon atoms which may or may not be interrupted with hetero atoms, and R^2 is phenyl, substituted phenyl, a fused benzo ring, or a monovalent substituted or unsubstituted saturated or unsaturated hydrocarbyl moiety having from 1 to about 4 carbon atoms which may or may not be interrupted with hetero atoms.

2. The reagent as set forth in claim 1 wherein in the substituted imidazole R is a saturated hydrocarbyl moiety having from 1 to about 4 carbon atoms.

3. The reagent as set forth in claim 1 wherein in the substituted imidazole R^1 is a saturated hydrocarbyl moiety having from 1 to about 4 carbon atoms.

4. The reagent as set forth in claim 3 wherein in the substituted imidazole R^2 is a saturated hydrocarbyl moiety having from 1 to about 4 carbon atoms.

5. The reagent as set forth in claim 1 wherein in the substituted imidazole R is phenyl.

6. The reagent as set forth in claim 1 wherein in the substituted imidazole R^1 is phenyl.

7. The reagent as set forth in claim 6 wherein in the substituted imidazole R^2 is phenyl.

8. The reagent as set forth in claim 1 wherein the substituted imidazole is selected from the group consisting of 1-methylimidazole, 1-ethylimidazole, 1-propylimidazole, 1-butylimidazole, 2-methylimidazole, 2-ethylimidazole, 2-propylimidazole, 2-butylimidazole, 4-methylimidazole, 4-butylimidazole, –methylimidazole, 1,2-dimethylimidazole, 1,2,4-trimethylimidazole, 1-phenylimidazole, benzimidazole, and 2-phenylimidazole.

9. The reagent as set forth in claim 1 wherein the substituted imidazole is selected from the group consisting of 2-methylimidazole, 2-ethylimidazole and a combination thereof.

10. The reagent as set forth in claim 1 wherein the molar ratio of imidazole to substituted imidazole is from about 0.3:2 to about 2:0.3.

11. The reagent as set forth in claim 1 wherein the molar ratio of imidazole to substituted imidazole is from about 0.5:1.5 to about 1.5:0.5.

12. The reagent as set forth in claim 1 wherein the molar ratio of imidazole to substituted imidazole is from about 1:1.3 to about 1.3:1.

13. The reagent as set forth in claim 1 further comprising a substantially water free alcohol solvent.

14. The reagent as set forth in claim 13 wherein the alcohol solvent is an ethylene glycol monoalkylether.

15. The reagent as set forth in claim 14 wherein the ethyl glycol monoalkylether comprises an alkyl group having from 1 to about 5 carbon atoms.

16. The reagent as set forth in claim 13 wherein the alcohol solvent is a diethylene glycol monoalkylether.

17. The reagent as set forth in claim 16 wherein the diethylene glycol monoalkylether comprises an alkyl group having from 1 to about 5 carbon atoms.

18. The reagent as set forth in claim 13 wherein the alcohol solvent is a propylene glycol monoalkylether.

19. The reagent as set forth in claim 18 wherein the propylene glycol monoalkylether comprises an alkyl group having from 1 to about 5 carbon atoms.

20. The reagent as set forth in claim 13 wherein the alcohol is selected from the group consisting of ethylene glycol monoalkylethers, diethylene glycol monoethylether, propylene glycol monoalkylethers, methanol, propanol, 2-methoxyethanol, tetrahydrofurfuryl alcohol, and mixtures thereof.

21. The reagent as set forth in claim 13 wherein the alcohol is diethylene glycol monoethylether.

22. The reagent as set forth in claim 13 wherein the alcohol is present in a proportion from about 30% by weight to about 80% by weight based on the weight of the reagent.

23. The reagent as set forth in claim 22 wherein the alcohol is present in a proportion from about 50% by weight to about 70% by weight based on the weight of the reagent.

24. The reagent as set forth in claim 13 further comprising sulfur dioxide and iodine.

25. The reagent as set forth in claim 24 further comprising a halic acid.

26. The reagent as set forth in claim 25 wherein the concentration of the halic acid is from about 0.1 moles/Liter to about 0.5 moles/Liter.

27. The reagent as set forth in claim 25 wherein the halic acid is hydroiodic acid.

28. The reagent as set forth in claim 25 further comprising a base selected from the group consisting of pyridine, diethanol amine, dipyridyl propane, imidazolium benzoate, methylimidazolium benzoate, and combinations thereof.

29. The reagent as set forth in claim 28 wherein the molar ratio of imidazole to additional base is from about 0.3:2 to about 2:0.3.

30. The reagent as set forth in claim 28 wherein the molar ratio of imidazole to additional base is from about 0.5:1.5 to about 1.5:0.5.

31. The reagent as set forth in claim 28 wherein the molar ratio of imidazole to additional base is from about 1:1.3 to about 1.3:1.

32. The reagent as set forth in claim 28 wherein the total amount of base in the reagent is no more than about 10 moles/Liter.

33. The reagent as set forth in claim 28 wherein the total amount of base in the reagent is no more than about 3 mole/Liter.

34. The reagent as set forth in claim 24 wherein the pH is from about 5.5 to about 8.

35. The reagent as set forth in claim 28 wherein the pH is from about 5.5 to about 8.

36. The reagent as set forth in claim 28 wherein the reagent comprises from about 0.3 moles/Liter to about 10 moles/Liter total base, from about 0.1 moles/Liter to about 10 moles/Liter sulfur dioxide, and from about 0.01 moles/Liter to about 3 moles/Liter iodine.

37. The reagent as set forth in claim 28 wherein the reagent comprises from about 0.5 moles/Liter to about 5 moles/Liter total base, from about 0.5 moles/Liter to about 3 moles/Liter sulfur dioxide, and from about 0.1 moles/Liter to about 1 mole/Liter iodine.

38. The reagent as set forth in claim 24 wherein the molar ratio of the base to the sulfur dioxide is from about 10:1 to about 0.3:1.

39. The reagent as set forth in claim 24 wherein the molar ratio of the base to the sulfur dioxide is from about 2:1 to about 0.5:1.

40. A one component Karl Fischer reagent comprising from about 0.8 moles/Liter to about 1.3 moles/Liters imidazole, from about 0.6 moles/Liter to about 1 mole/Liter 2-methylimidazole, from about 0.1 moles/Liter to about 0.5 moles/Liter Imidazole hydroiodide, from about 0.75 moles/Liter to about 1.6 moles/Liter sulfur dioxide, and from about 780 grams/Liter to about 820 grams/Liter diethylene glycol monoethylether.

41. The one component Karl Fischer reagent as set forth in claim 40 wherein the pH of the reagent is from about 5.5 to about 8.